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Phillips et al.

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[54] **TWO POSITION FOLD-OVER DIPOLE ANTENNA**

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Related U.S. Application Data

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[51] **Int. Cl.**[6] **H01Q 1/24**

[52] **U.S. Cl.** **343/702**; 343/805; 343/822; 455/89

[58] **Field of Search** 343/702, 806, 343/795, 805, 880–882, 822; 455/89, 90; H01Q 1/24

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[57] **ABSTRACT**

A radio communication device includes a radio signal source (**415**) positioned in the first housing portion (**101**). A second housing portion (**103**) has a first end movably supported on the first housing portion such that the housing portions are reconfigurable between an extended position and a collapsed position. A dipole antenna (**107**) has a first arm (**440**) positioned in the first housing portion and a second arm (**441**) positioned in the second housing portion. A respective end of each of the arms is connected to the signal source. Plates (**450, 451**) are positioned on the first and second housing portions and connected to the antenna arms such that they are capacitively coupled when the housing portions are collapsed and are not coupled when the housing portions are extended.

18 Claims, 7 Drawing Sheets